

App. No. 09/843,901
Amendment Dated September 5, 2006
Reply to Final Office Action Dated April 3, 2006

Listing of claims:

1. (Currently amended) A computer-implemented method for maintaining configuration information on a mobile device, comprising:

receiving a message, wherein the message identifies the source of the message and changes to settings of the mobile device; including a request associated with configuration information stored on the mobile device;

identifying, by a push router of the mobile device, the source of the received message, wherein the push router associates a security role with the received message based on the identified source of the received message and inserts an identifier into the received message to identify the associated security role;

passing the message to a configuration manager;

parsing, by the configuration manager, the message to identify at least one configuration service provider, among a plurality of configuration service providers, responsible for the settings identified in the message;

determining whether the assigned security role of the message, assigned by the push router, is sufficient to invoke the identified configuration service provider;

failing the transaction when the assigned security role of the message is not sufficient;

passing the message to the configuration service provider when the assigned security role of the message is sufficient, wherein the identified configuration security provider determines whether the assigned security role of the message is sufficient for settings associated with the configuration service provider;

failing the transaction when the assigned security role of the message is insufficient for the settings; and

performing the changes to the settings of the mobile device when the configuration service provider determines that the security role of the message is sufficient.

~~identifying the source of the received message from data associated with the received message;~~

~~associating a security role with the received message based on the identified source of the received message;~~

~~inserting an identifier into the received message to identify the associated security role;~~

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~~determining at least one configuration setting within the configuration information affected by the received message;~~

~~comparing the associated security role of the received message with a security privilege associated with the at least one configuration setting on the mobile device; and~~

~~if the associated security role of the received message is in agreement with the security privilege associated with the at least one configuration setting on the mobile device, processing the request associated with the configuration information.~~

2. (Cancelled)

3. (Previously presented) The computer-implemented method of claim 1, wherein the source of the message is identified from authentication and decryption of the received message.

4. (Currently amended) The computer-implemented method of claim 1, wherein the ~~information within~~ the message includes a shared key that identifies the source of the message.

5. (Currently amended) The computer-implemented method of claim 1, wherein determining whether the assigned security role of the message, assigned by the push router, is sufficient to invoke the identified configuration service provider further comprises comparing the assigned security role of the message to an assigned security role of the configuration service provider. ~~processing the request associated with the configuration information further comprises comparing the security role with another security privilege associated with a configuration service provider, the configuration service provider being responsible for managing the configuration information stored on the mobile device.~~

6-7. (Cancelled)

8. (Currently amended) A computer-readable medium having computer-executable components for managing security on a mobile device, comprising:

a stored setting having an assigned security role that identifies a privilege that an entity attempting to access the stored setting must satisfy in order to access the stored setting;

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a router configured to receive a configuration message over a wireless communication link, the router being further configured to identify a source of the configuration message and insert a security role identifier into the received configuration message based on the identified source, the router being further configured to pass the configuration message to other components of the mobile device, the configuration message including an instruction that affects a configuration setting; and

a configuration manager configured to receive the configuration message from the router and to parse the configuration message to identify a configuration service provider responsible for the instruction, wherein the configuration manager passes the configuration message to the configuration service provider when the assigned security role of the configuration message provides a privilege to access the configuration service provider; and the configuration setting affected by the configuration message, the configuration manager being further configured to compare the assigned security role of the configuration message to security roles assigned to configuration settings stored on the mobile device;

~~wherein if the configuration setting identified in the configuration message identifies the stored setting, and wherein if the assigned security role has sufficient privilege to access the stored setting, the configuration manager causes the instruction that affects the configuration setting to be processed.~~

the configuration service provider being configured to receive the configuration message from the configuration manager, determine whether the assigned security role of the configuration message has sufficient privilege to access the stored settings, and execute the instructions when the configuration service provider determines that the assigned security role has sufficient privilege to access the stored setting.

9. (Currently amended) The computer-readable medium of claim 8, further comprising a wherein the configuration service provider is configured to manage at least one configuration setting stored on the mobile device, and wherein the processing of the instruction is performed by the configuration service provider.

10. (Original) The computer-readable medium of claim 9, wherein the configuration service provider has an assigned security role that identifies a privilege that must be associated with an instruction that affects a configuration setting which the configuration service provider maintains.

11. (Original) The computer-readable medium of claim 10, wherein the configuration manager is further configured to determine if the instruction that affects the configuration setting

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is in agreement with the security role assigned to the configuration service provider that maintains the affected configuration setting, and if so, the configuration manager is further configured to pass the instruction to the configuration service provider to be handled.

12. (Original) The computer-readable medium of claim 11, wherein the configuration service provider determines if the instruction is in agreement with the security role assigned to the stored setting prior to processing the instruction, and if not, terminating the processing of the instruction.

13. (Currently amended) A computer-readable medium having computer-executable instructions for maintaining configuration information on a mobile device, comprising:

receiving a configuration message, wherein the configuration message includes a header field that identifies a source and an instruction field that identifies a configuration setting on the mobile device;

identifying, by a push router of the mobile device, the source of the received configuration message from the header field, wherein the push router inserts a security role identifier into a security role field of the received configuration message, wherein the security role is based on the identified source of the received configuration message;

passing the configuration message to a configuration manager;

parsing, by the configuration manager, the configuration message to identify at least one configuration service provider, among a plurality of configuration service providers, responsible for the setting identified in the configuration message;

determining whether the inserted security role identifier of the configuration message, assigned by the push router, is sufficient to invoke the identified configuration service provider;

failing the transaction when the inserted security role identifier of the configuration message is not sufficient;

passing the message to the configuration service provider when the inserted security role identifier of the configuration message is sufficient, wherein the identified configuration security provider determines whether the inserted security role identifier of the configuration message is sufficient for the setting associated with the configuration service provider;

failing the transaction when the inserted security role identifier of the configuration message is insufficient for the setting; and

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performing the changes to the setting of the mobile device when the configuration service provider determines that the inserted security role identifier of the configuration message is sufficient.

~~receiving a configuration message including a header and an instruction associated with a configuration setting stored on the mobile device;~~

~~identifying the source of the received message from the header of the received configuration message;~~

~~associating a security role with the instruction based on the source of the received message, wherein the associated security role is associated to the instruction by a tag included in the message;~~

~~comparing the security role of the instruction with a security role associated with the configuration setting stored on the mobile device; and~~

~~if the security role of the instruction is in agreement with the security role of the configuration setting, processing the instruction.~~

14. (Cancelled)

15. (Previously presented) The computer-readable medium of claim 13, wherein the source of the message is identified from authentication and decryption of the received message.

16. (Currently amended) The computer-readable medium of claim 13, wherein the information within the configuration message includes a shared key that identifies the source of the configuration message.

17. (Currently amended) The computer-readable medium of claim 13, wherein determining whether the inserted security role identifier of the configuration message, assigned by the push router, is sufficient to invoke the identified configuration service provider further comprises comparing the inserted security role identifier of the configuration message to an assigned security role of the configuration service provider, wherein processing the instruction comprises comparing the security role of the instruction with another security role associated with a configuration service provider, the configuration service provider being responsible for queries of and changes to the configuration setting.

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18-28 (Cancelled)